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# Edutainment Content for Mobile Devices in Kenya

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## **Edutainment Content for Mobile Devices in Kenya**

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The subject of this thesis was initially researched by the developer of the Rainbird Tales concept during the year 2012 in Finland. Later during the year the concept was presented to the author who was in the process of searching for a subject for his thesis. The co-operation between the developer and author began almost immediately.

The purpose of the concept was to be able to provide schools, teachers, clubs and parents an affordable and digitized tool to deliver valuable life lessons to children between the ages of 4 to 10 by utilizing interactive storytelling and multimedia edutainment content. The product would also support internationalization by providing children with educational and entertaining stories from around the globe regardless of their physical location. During the initial research period it was discovered that the idea could not be started successfully in Finland due to the lack of proper infrastructure in the creative industries, more accurately the lack of integration between creative content production, technology and businesslike thinking.

Kenya was then chosen as the target market for the product due to the developer's pre-existing networks and experience of the Kenyan ICT and creative content production markets.

The thesis research began with idea generation in the fall of 2012. As a result, an open ended questionnaire was designed and sent to a small number of carefully selected professionals operating within the Kenyan ICT markets. It was soon discovered that sending the questionnaire by e-mail would not provide sufficient information for the research. This problem was solved by personal interviews of the professionals in Kenya by the concept developer. This was made possible by another cultural project called amka Kenya which was run by the concept developer. The project took place in Nairobi from October 2012 to April 2013 and was partly financed by the Finnish Foreign Ministry.

The research provided useful information and confirmation that demand for the Rainbird Tales concept exists in Kenya.

**Keywords** edutainment, ICT, interactive storytelling, Kenya, mobile devices

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## 1 Introduction and Background

This thesis was written in co-operation with a Finnish freelance producer who had been researching the subject during 2012. It focuses on providing the producer with market research related information regarding her most recent idea - introducing edutainment content for mobile devices in Kenya, as well as other Swahili- and English-speaking countries. The information provided by this thesis will be accounted for by the company when operational strategies are considered.

The producer is currently in the process of making short stories, e-books and audio stories for mobile devices.

The producer of this concept has prior experience in arranging digital storytelling workshops for children in Finland, Kenya, Argentina and Zimbabwe. Networks for the concept include the Kenyan Embassy in Stockholm, the Finnish Embassy in Nairobi, the Kenyan diaspora in Finland, the acting director of the Kenya institute of education, edutainment content developers located in Kenya and Finland, and an internationally recognized expert in ICT (Information Communication Technology) as well as BOP (the Bottom of the Pyramid approach to international networks).

The development need for the concept is justified by the fact that edutainment content within mobile devices in Africa is estimated to experience significant growth over the next two years (Rantanen 2012). To explain this statement further, there are few libraries available to the general public in Kenya (Otike 2004), school books are not available for the population living under the poverty line, and yet almost everyone has access to a mobile device. Additionally, the Finnish education system is ranked high in terms of international standards and is capable of acting as a neutral, esteemed and a reliable provider of edutainment content.

### 1.1 Business Description

The business description is based on ideas outlined by Alexander Osterwalder. He aims to create a comprehensive business description by incorporating a business model canvas that is formed of 9 different steps in business model generation. For further exploration of Osterwalder's 9 steps model for successful business model creation please refer to section 6 of this thesis.

## 1.2 Business Vision

The vision of the Rainbird Tales concept developer is to provide an affordable and digitized tool for educating young children by using storytelling as means to deliver important and entertaining life lessons for kids between the ages of 4 - 10 years.

## 1.3 Product

To be able to describe the product in question it is very important to determine what the word “edutainment” stands for. It is a form of education that has been designed to be entertaining, in order to keep people interested and engaged. The word itself is blended from two separate words also referred to as a portmanteau; which are “education” and “entertainment”. Edutainment can be encountered through various different mediums; books, television shows, movies, class activities and video games. (Wisegeek n.d.)

The product is also based on stories gathered from different sources. These sources vary from countries to ethnic backgrounds of the storytellers themselves. Ultimately, a database of stories from around the world can be created in form of a website that can then be connected to separate applications allowing access through usage of personal computers, mobile phones or tablets. The stories we used to listen to as children that aimed to provide us with valuable life lessons are an exceptionally valid example of the stories that are being planned to be transferred into a setting that is supported by edutainment, related platforms and operating systems. The stories can be provided in several different formats which are; short stories, e-books and audio stories.

E-books are an electronic version of a traditional print book that can be read by using a personal computer or other mobile platform, such as a mobile phone or tablet computer. (Searchmobilecomputing n.d.)

Audio stories on the other hand are stories that have been spoken and recorded and can be listened to by using a media player included in a personal computer, mobile phone or tablet computer.

Potentially animation, videos and photos will be added to the audio stories to provide the viewer with a more interactive storytelling experience. The additional material will provide the end user extra entertainment value that will contribute to making the

experience more fun instead of only listening to a story that provides important life lessons.

## 2 Methodology

### 2.1 Data Collection

A questionnaire was used to acquire information about the Kenyan mobile edutainment markets. This questionnaire was designed to use open-ended questions as means to obtain as much and as accurate information as possible. It was then sent to a few carefully selected individuals that work or are otherwise linked to the research area in question.

The structure of open-ended questions do not include any options for the respondent to fill in after reading the research question; thus giving the respondent his/her full capability to answer to the question at hand as he/she best sees fit. This way the questionnaire relies on the respondent to provide more meaningful information in comparison to creating a questionnaire using closed questions; that initially provide ready answers to each research question in the questionnaire.

(McNamara n.d.)

In addition to the questionnaire a series of interviews were conducted within Kenya targeting people that have prior experience in the mobile application and development field. This was done because getting the people to answer the open-ended questionnaire was found more difficult than it was initially expected.

### 2.2 Reliability

According to Silverman the reliability of any research is measured by the amount of consistency in different situations or periods of time. For example; the same person conducting the research during different periods of time, or alternatively a different person conducting the same research during the same time as the initial research is being made (Silverman, 360).

In other words reliability can be measured by determining whether the interview results are prone to be affected by accidental changes in circumstances when it comes to the intended business environment. When conducting quantitative research;



reliability can be determined by finding out if someone else can later conduct the same research and end up with the same research results as the person that researched the same subject earlier. This however, is not the case in this particular thesis that bases itself on a business idea and its development. (Silverman, 360)

In order to make the research conducted more reliable, some steps have been taken to make the research process more transparent to the reader. For example, extensively describing the research strategy and the method that was used to acquire the information is a viable example of an attempt to provide information with more reliability. (Silverman, 360)

### 3 Market Research

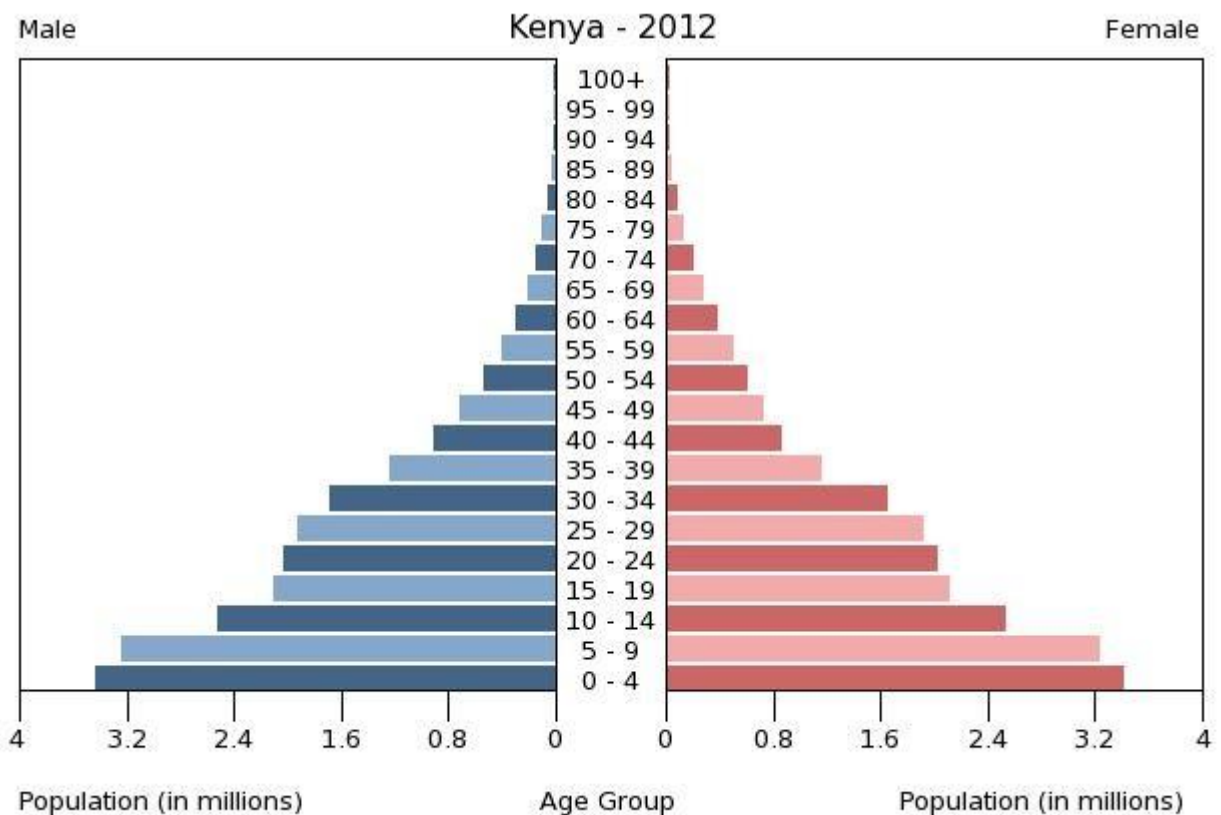
#### 3.1 The Kenyan Society and Population

In order to be able to provide the reader with a glimpse of the potential target market segment for the Rainbird Tales concept the writer gathered essential information on the Kenyan public and age structure. While studying the pictures below (Picture 1 and Picture 2) the reader might want to ensure he/she can remember what kind of aspects define the demographic target group for the product.

Kenya Factbox:			
Official languages:	English, Kiswahili		
Population:	43 013 341		
Major Cities:			
Nairobi (capital):	3 375 000		
Mombassa:	966 000		
Age Structure:	Total / %:	Male:	Female:
0-14 years:	42.5%	9 176 000	9 120 710
15-64 years:	54.8%	11 765 106	11 787 917
65 years and over:	2.7%	512 921	650 687
Median Age:	18.8 years	18,7 years	18,9 years
School Life expectancy:	11 years	11 years	11 years
Literacy:	87,4 %	90,6 %	84,2 %

Picture 1: Kenya Factbox (Central Intelligence Agency 2012)

The initial target segments for the Rainbird Tales concept were children from ages 4 to 10. By scanning through the numbers provided by the picture above and below (Picture 1 and Picture 2); the reader should be able to draw a conclusion that the age structure in Kenya mainly consists of pupils that belong to the age group of 15 to 64 years old and not too far behind is the age group that entails 0 to 14 year olds. Even though a portion of the latter mentioned age group can be considered as the proper target segment for the concept it should still be clear that the group that could potentially use the product is larger than the entire population of Finland.



Picture 2: Kenyan Population Pyramid (Central Intelligence Agency 2012)

The purpose of the population pyramid was to visualize the points made previously and further support the argument that the potential target market really exists in Kenya. The children belonging to the age group of 5 to 9 years old alone contribute to roughly 14,9 % (6,4 million people) of the entire country's population.

### 3.2 SWOT Analysis

The SWOT analysis table was the result of idea generation with the concept developer and aimed to further clarify the potential the ready concept is capable of offering its creator. Please refer to the explanations and the picture (Picture 3) below.

#### 3.2.1 Strengths

According to the interviews and research conducted on the subject the creation of edutainment content (story-telling for children to be more exact) for the mobile ICT markets in Kenya is a new idea and has not been attempted before. Due to the newness of the idea only one joint venture has been established in Kenya that is currently developing something similar to this business idea (See interview section for further detail). The business idea is simple and fairly straight forward to set-up once all preliminary research and modifications have been made to the product. The business idea has potential of offering the partnering company (Rainbird Tales concept) with potential to become a 'lifestyle business' from the very beginning.

#### 3.2.2 Weaknesses

The product has one weakness that it shares with any media related content; documentaries, movies, games, etc. It can be stolen and ripped for free distribution over the internet, thus losing its value in the marketplace. Generally thinking, this applies to all content that is planned on being shared and distributed over the internet and should not be undermined under any circumstance.

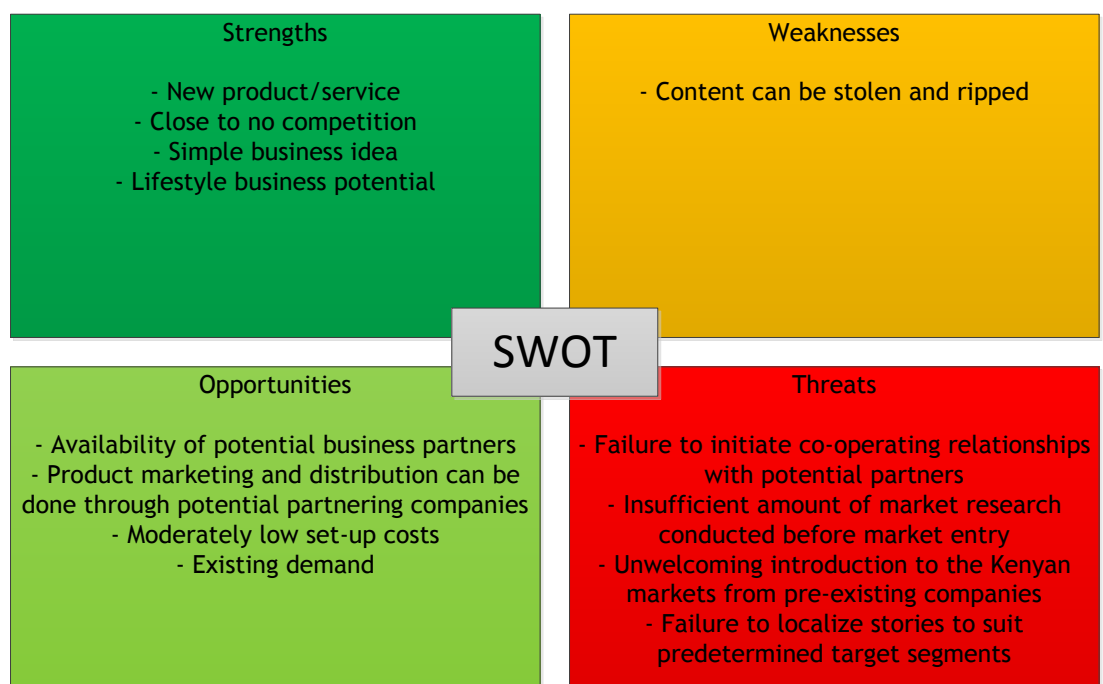
#### 3.2.3 Opportunities

The business idea potentially has numerous opportunities. Due to the selection of the target market potential business partners are very available. Once partnerships have been formed the marketing and distribution strategy can be mainly conducted through their services that generally require no extra investment from the creator of the content in question. Business set-up costs are moderately low in the target country which results in the business idea not needing immense amounts of financial backing in the very beginning. According to conducted interviews and research the

demand for the product already exists and is expected to start booming during the next 3 - 5 years.

### 3.2.4 Threats

The opportunities for the business idea also yield a number of threats. Primarily, failure to initiate co-operating business relationships with potential partners can cripple the market entry and related strategy. Secondly, rushing to enter the marketplace without conducting a sufficient amount of market research can also potentially yield considerable risk factors. Finally, an unwelcoming introduction from companies already operating within the Kenyan markets can result in a failed market entry strategy. Additionally, localizing the created edutainment content to support local every day examples is also likely to result in the product being hard to understand for the potential end users.

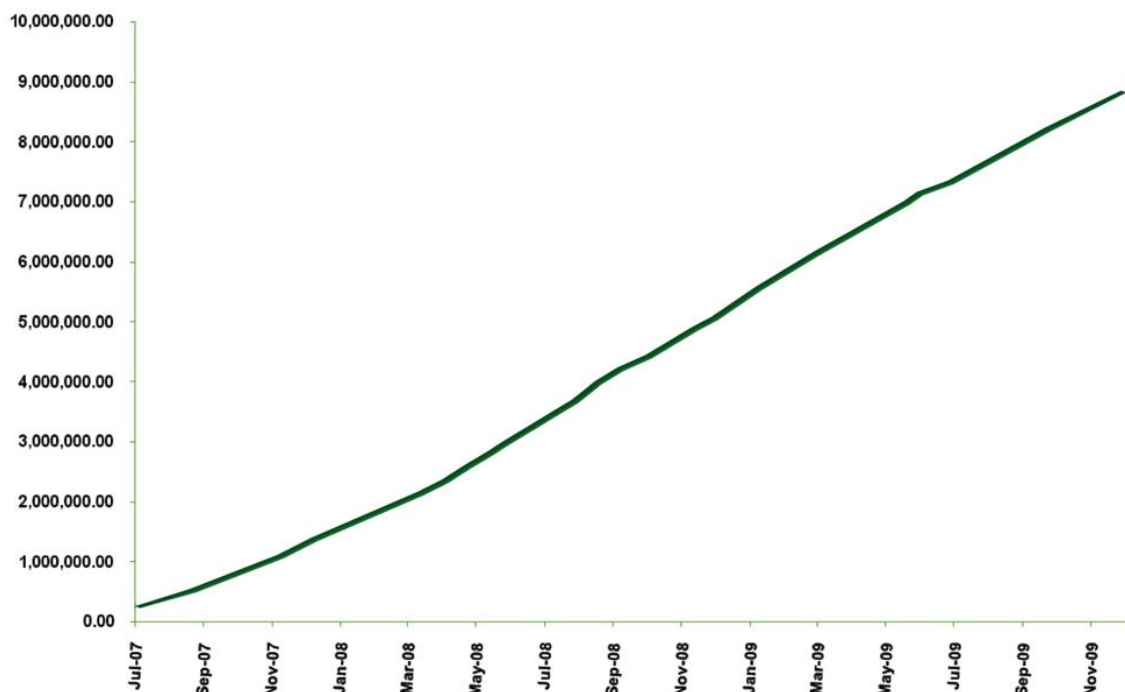


Picture 3: SWOT Analysis table

### 3.3 Case: MPESA

The MPESA success story has greatly contributed to driving Kenya's mobile application and ICT development forward over the past 5 years. MPESA was developed by Vodaphone and was first launched in March of 2007 by its Kenyan affiliate Safaricom. Its purpose was to provide the Kenyan public with an alternative paying method instead of having to visit the local banks to make withdrawals and/or payments. In other words, MPESA is a mobile phone based micro financing and money transfer service.

By August 2010 MPESA had already acquired 11,9 million subscriptions which corresponded to 73% of Safaricom's customer base, 54% of Kenyan adults and 31% of the entire country's population. During the same timeframe co-operation with 19500 stores out of which nearly half were located outside urban areas were established. The co-operation between MPESA and the stores mainly involved services relating to cash-in and cash-out using their mobile phones at the locations where the co-operating stores existed. At the same time, US \$415 million were transferred in person-to-person transfers per month. This amount totaled to roughly 17% of the entire GDP of Kenya. The following table will demonstrate the growth the MPESA application over a timeframe less than 3 years in length.



Picture 4: Growth of M-PESA Customer Base (Mas & Radcliffe 2010)

Even though, these figures are slightly out-of-date it does not mean the growth has stopped over the past 2 years. In fact, MPESA has continued growing at an alarming rate and is currently not showing any signs of slowing down (Mas & Radcliffe 2010).

According to one of the interviewees the reason why MPESA was so successful was because of a “so-called” ‘perfect storm’; which meant that the Kenyan public were already used to having mobile phones in their use on a daily basis, the infrastructure needed for launching a service like MPESA already existed in terms of electricity, data and an educated English speaking population (Interview with Nivi Mukherjee).

### 3.4 The Kenyan presidential elections

Because the outcome of the presidential elections in Kenya was mentioned to affect the future of the Kenyan ICT market place by several of the interviewee’s, the writer of the thesis thought that providing additional information thereof is crucial in order for the reader to be able to draw their own conclusions on the business idea and the thesis itself.

According to news articles and Kenya presidential election related news casts Uhuru Kenyatta was selected to act as Kenya’s next president for the upcoming term by winning the elections by only 4099 votes (50, 03%) out of a total of 12, 3 million votes casted. Kenyatta was competing against Prime Minister Raila Odinga who harvested a voting percentage of 49, 97% (out of the 12, 3 million total votes cast). Before being elected for presidency he was the acting deputy prime minister of Kenya.

Kenyatta’s presidency is likely to affect Kenya’s relationships to the West, this due to Kenyatta’s recent history with the International Criminal Court that charges him for his “alleged role in directing some of Kenya’s 2007 post-election violence”. After the 2007 presidential elections in Kenya, unrest among the tribes broke out displacing up to 600 000 people and killing an estimated 1300 people.

Many Western companies already operate in Kenya. However, Kenya’s weakened relationship with the West can potentially hinder the growth of the Kenyan ICT market due to the recent presidential elections in March 2013. Changes within the market can occur and should be followed closely for some time before entering the market place with a new product. (The Associated Press 2013)

Furthermore, President Kenyatta has made several promises regarding his upcoming time as president. First and foremost, he has promised to set aside 6 billion Kenyan

shillings to be used to create a new Youth and Women Fund. Secondly, he has assured the Kenyan public and parents that during the first 100 days of his government that all Kenyan children joining grade one in public school next year will receive a laptop each as he already promised during his campaigning period. To support his previous claim further he said: “We made a promise to our children and we will keep it because we believe that early exposure to technology will inspire future innovation and be a catalyst for growth and prosperity.” (Mayabi 2013)

While researching the possible effects of President Kenyatta’s election the writer also came across an interesting blog post named “Laptops or Lollipops?” written by a Jared Odero via the Kenya Stockholm Blog website:



Picture 5: Pedagogically, what is the value of assigning Class One children laptops?

Odero states several problems related to President Kenyatta’s free laptops promise to all starting Class One children. Perhaps the most important reason why the free laptops promise cannot work at its full potential is the lack of qualified and skilled teachers (amounting up to 80 000 teachers) especially in the rural areas of Kenya. According to the Kenyan National Union of Teachers (KNUT) an urgent need of increasing the number of teachers exists in the country. The current amount of teachers in Kenya amount up to roughly 275 000 while at least 350 000 are needed.

Secondly, the reason why many children are attending public schools are the incorporated feeding programs; Kenyan children do not have enough food at home to survive on a single school meal. Odero’s thoughts on subject seem valid when he states that; “A hungry child will not benefit from a laptop.”

Odero also expresses his opinion that President Kenyatta should study the challenges related to his laptop promise further by engaging in co-operation with the Kenyan information and communications technology sector as well as the country's top educators. Installing internet-driven systems to promote collaborative learning is likely yield the best possible results in terms of the laptop promise. In other words, linking rural, urban and sub-urban schools together via internet-driven systems would provide their students with a wider variety of learning possibilities for the entire country. (Odero 2013)

#### 4 Interview Analysis

To be able to give the reader a concrete perception of the interviewees and their backgrounds that were used to provide information for this project a concise company introduction is in order.

Interviewee 1 works for Finpro that is an organization that focuses its activities on international growth and success for Finnish companies that are planning on entering the international markets. In a nutshell; Finpro's workforce consists of a group of highly trained consultants located in many countries that offer their expertise, usually regarding the country's markets they are based in, to Finnish companies and promote Finland and its markets globally. The expertise the Finpro consultants offer does not only limit to local market knowledge, but also to cultural differences and their effects on local practices and the way to conduct business in a given target market/country. (Finpro 2012)

Interviewee 2 is the founder of the E-Limu Company that focuses on a ready-made and designed tablet that offers children, schools and private users the ability to learn more efficiently by incorporating entertainment and education; also referred to as edutainment.

The E-Limu platform consists of a vast collection of learning enhancing applications such as:

- " Learning revision content of all 6 Kenyan Certificate of Primary Education (KCPE) subject areas
- 3D animations to help students grasp complex concepts
- Animated teacher characters to draw attention to important concepts and give tips and tricks
- Games to capture interest and improve cognitive thinking, memory and focus



- Songs and pneumatic devices to aid retention
- Quizzes to track progress
- Examination tips and techniques
- Simple design aimed for children's use
- Internet enabled to facilitate Q&A forums with well experienced teachers
- No browser to misuse of internet connectivity (kiosk application)
- Feedback from students after every topic
- and more..."

The company works in close co-operation with schools, libraries and parents of children and they have a collection of pre-established partners and investors working to enhance the tablet. (E-Limu 2011)

Interviewee 3 works at m:Lab East Africa that is one company of a consortium of four entities that have a common goal of becoming the "leaders in identifying, nurturing and helping to build sustainable enterprises in the knowledge economy." Primarily m:Lab East Africa focuses on incubating new companies that operate in the mobile application field and offer additional training to people that already have a preliminary software development background. (m:lab east Africa 2011)

Interviewee 4 is a lawyer by profession and is also the chairperson for KEFISO (Kenya Finnish Society) located in Finland. KEFISO aims to "unite the Kenya-Finnish society, foster common ideology, and elevate living situation through support of individual member strength and interests." "The founders are Kenyans and Finns who have lived around and together for years and have been moved by natural dispensation to find a shelter organization that will serve generations to come." (Kenya Finnish Society 2013)

#### 4.1 Interview 1: Finnpro, Nairobi, Kenya: Esa Rantanen

Contacting the Kenyan branch of Finnpro provided a lot of useful information regarding the current situation of the country's ICT markets and environment.

Non-governmental organizations mix up the Kenyan market negatively by pushing locally established companies out of the Kenyan market by bringing foreign companies that operate using money acquired from their own governments. This is something that potentially could reflect in negative PR to any foreign company aiming to start

its operations within the Kenyan markets and thus; should be studied carefully before market entry.

The ICT markets and their development in Kenya are perceived to be less advanced than they actually are by Europeans. This misperception can potentially offer foreign companies an advantage when it comes to contemplating whether or not to start operations within the Kenyan ICT market. For example, the MPESA application can be used to define the correct level of development of the Kenyan ICT markets because it is one of the reasons why the level of ICT development in the country has taken such a huge leap forward. For more information on the MPESA application please refer to topic 5.2 Case: MPESA located on page 12 of this report.

Like the misperception of the Kenyan ICT market situation a misperception in terms of the Kenyan public also exists in the eyes of Europeans. Not all Kenyans are poor - which is why the general African public should not be held in low regard despite the pre-existing prejudices. This is the core reason why European people visiting Kenya tend to be amazed by the amount of technology that is available for the use of the local companies in terms of utilization of research, development and production.

To explain the Kenyan marketplace in further detail an important aspect was discussed during the interview. Kenya is and should be considered a typical export market for other countries. In addition, the economy of the country is growing and has a tendency of being considerably livelier in comparison to Europe. The European economic situation has been stagnant during the past years which make it less interesting to companies.

Like it was discussed in the previous paragraph; generally speaking the economic growth in Kenya is very fast, but its future will be dependent on the results of the general elections held on the 4<sup>th</sup> of March 2013. Monitoring the situation thereafter should be considered extremely important to any company that is interested in starting operations within the Kenyan markets. The current situation in Kenya could be described as a so-called “waiting and seeing”-stage when it comes to future decision-making for companies that are considering expanding operations to the Kenyan marketplace.

The Kenyan business culture is easier to approach for Finland and other European countries due to some similarities that exist between them. These are; the enforcement of common law and the existing education system that is based on a British model. In addition, Kenyans have a tendency of being very punctual when it

comes to business related situations. Depending on the nature of any one foreign company's situation, the African and more specifically Kenyan market is easier to enter than for example China where these similarities between the countries do not exist.

The current situation of Finnish companies that design applications for the ICT markets in Kenya can be perceived as not very good. This is because most Finnish application designers focus on designing applications for older phone models rather than putting more emphasis designing the applications for the newer smartphones that have, and will increasingly become more popular in Kenya. The method that is currently being used by Finnish application designers might work better right now, but what will happen when most people living under the poverty line in Kenya start walking around with access to the previously defined smartphones? This is why the Finnish application designers and companies should start paying more attention to the future of the Kenyan ICT market - and more specifically, the availability of smartphones among the general population.

Nokia used to occupy a large market share in terms of mobile phone sales in Kenya for a long period of time, but now that the times are changing Huawei and Safaricom (the local telephone operator) have occupied the majority of the markets by limiting phone offerings to mainly smartphones. This is one more reason why application design in the future should concentrate in producing applications for smartphone and tablet based platforms. Currently, Nokia is perceived to be a mobile phones manufacturer that emphasizes on cheap long lasting simple mobile phones instead of smartphones. This is because Nokia initially targeted the wrong customer segments and ended up mixing up the market and losing their standing by doing so.

Tablet and smartphone pricing varies from expensive to cheap depending on how much money the customer has at his/her disposal. Brand loyalty still does exist and should under no circumstance be underestimated, but neither should the fact that tablets and smartphones made in China are becoming increasingly popular among Kenyans due to their comprehensive price and quality offerings.

The amount of outsourcing Kenyan enterprises include in their business processes have been rising constantly during the past couple years. Especially the purchase of design services and manufacturing from larger Chinese companies has become more common in the recent years.

Potential business partners and/or competition were also discussed during the interview. Sanako Language Laboratories, Leia Company based in Tanzania and Safaricom (the local telephone operator) were mentioned. In addition to the companies mentioned above the National ICT Innovation and Integration Centre was also discussed. The Centre is primarily responsible for testing ICT-solutions for governmental schools in Kenya. They are also known to being in charge of organizing educational events for public school teachers in terms of the use of ICT related teaching equipment. Paying close attention and studying companies that operate close to same field as the initial business idea should be considered a “must” before considering actual market entry or related strategies.

Existing music player and production related mediums should be researched. This is because CD's and CD players have been plummeting in popularity over the recent years within the Kenyan market. Even though people do not buy CD's and CD players anymore, piracy still seems to be “booming” especially in the close proximity of local slums in Nairobi as an example. New mediums, such as cloud services should be investigated to determine the most cost-effective way to transfer music and video to the end-users. Despite the fact that piracy still exists in some parts of Kenya the players required to playback ripped DVD's and CD's are becoming less common. This is the reason why the emphasis; in terms of viable mediums for sharing the created content, should be placed on cloud services instead of CD's and DVD's.

When different target groups for the product were discussed it was mentioned that the Kenyan private schools have more money in comparison to the public schools. This is the reason why should also be considered more susceptible to changes in teaching methods, especially; when it comes to the implementation of technological gadgets, such as tablet computers and related content. The private schools being more open to new teaching methods are not the only advantage gained by prioritizing them as key customers for the developed content. They are also capable of completing their decision-making processes faster when compared to public schools. Generally thinking, this would mean that co-operation between involved the company and the private schools would be smoother and would present less problems when considering its public counterpart.

The questionnaire also included a question regarding possible governmental financial aid that could be applied for within Kenya. After discussing the subject it was determined that such aid does not exist in the country, which means that finances needed to establish business operations should be acquired from banks or angel investors. In order to establish contacts among local angel investors the IHAP

competition that has been organized every year for several consecutive years could be attended. The competition is generally attended by promising ICT companies that offer potential angel investors with sound business ideas. Angel investors are known to arrive to the competition and scout for new possible business opportunities with the attending companies.

The future of the Kenyan public educational system does not look very good because not enough study materials and books are available for the use of students that attend public schools. Changes to the public school system made by the government is a situation that is extremely unlikely, which would result in the insufficient amount of books remaining to be the primary source for information for Kenyan children. The implementation of ICT related study materials (for example the E-Limu tablet computer) would offer the children increased maneuverability in terms of study material for public and private schools alike. This is the reason why the business opportunity for the business idea definitely exists within the Kenyan ICT market. (Rantanen 2012)

#### 4.2 Interview 2: E-Limu, Nairobi, Kenya: Nivi Mukherjee

The interview with the CEO of E-Limu provided a perfect example of how an IT related business should be set up in Kenya. Possible problems regarding the IT field were also established over the course of the interview.

The E-Limu tablet and educational system has been originally designed for the android platform, but the company is currently looking forward to expanding to other platforms as well. The educational content used by the device has been modified to support Mobile WEB format which can be accessed using any device regardless of what platform that particular device is using to function correctly. Considering the Mobile WEB platform as the most viable medium for preliminary use before any possible expansions is advisable. This argument is based on pro's the Mobile WEB platform offers for the edutainment content; easy accessibility and customizability. Considering using any other platform at start could limit the amount of users radically in the beginning when the traffic is most important in order to give the product the ability to establish a sound foothold within the edutainment content market in Kenya.

The recent history of E-Limu can be determined to be rather inspiring. After all, the company started off as part of the Kenyan iHub without making any preliminary investments of its own. The purpose of the Kenyan iHub community is to provide

technologically gifted developers an open space to work on their innovative IT related business ideas. The iHub community also offers these developers with a chance to receive financial aid from visiting angel investors that are constantly looking for new emerging ideas to back-up (iHub 2013).

The interview also discussed whether or not the actual demand exists for educational content in the Kenyan marketplace. Because the intended target groups for E-Limu mainly consist of children attending public and private schools, along the parents of those children; it was established that an increasing amount of Kenyan parents are willing to invest more money in order to provide their children with better education in hope of providing the their children with a better footing in life when it comes to future job selection and related competitive advantage. Additionally, in 2003 the primary school education in Kenya was made “free-of-charge” that ended up freeing a considerable amount of disposable income and extra emphasis for extra tuition. Also the fact that the Kenyan syllabus has not undergone any changes since 1968 makes the E-Limu platform more groundbreaking than it already is - thus generating an increased amount of interest towards the product among potential target groups. Judging from what was discussed in the interview it can be determined that the demand for educational content definitely exists within the Kenyan ICT marketplace and schooling system.

E-Limu is currently researching the most cost-effective device to run the E-Limu platform on. It was noted that price differences can be rather significant. In other words, one can either purchase a \$500 device from Samsung or alternatively take the business to China and end up getting roughly five devices for the price of one. Even though using \$100 devices might sounds considerably more cost-effective the quality differences between devices must not be forgotten.

Due to Kenya’s high amount of rural areas and schools that might not always have electricity at their disposal, it is extremely important for the E-Limu tablet to be solar chargeable. Assuming schools located in rural areas do not have electricity one can also assume that they also lack internet access. This problem can be solved through the use of portable WiFi technology that enables the transfer of portable WiFi hotspots to designated target areas. All in all, this research indicates that sufficient research in terms of devices and regional capabilities should be held in high regard for any company that is planning on implementing any kind of software for any one specific platform; especially if the company in question is planning on providing a ready-made product including a specifically designed device to operate the created system.

Animation services have been outsourced by E-Limu and they were discussed in the interview because the business idea this report is about also lacks animation for the pre-existing stories. The discussion provided a new contact in Kenya, more specifically; a firm that creates story animation and voice for pre-existing stories, also known as Storymoja.

More information concerning competitors/business partners was acquired through this interview; this particular competitor/potential business partner was already identified in the interview with Finpro. Information suggests that Safaricom (the local telephone operator) is co-operating with the Kenyan National Library service to create audio and animated stories for mobile phones and tablets. If a business proposal is out of question; this joint venture between the above mentioned entities should be thought of as the main competitor for the edutainment content the partnering company to this report is aiming to create.

Other competitors also exist within the Kenyan ICT markets, but they do not operate with the same business idea as the joint venture mentioned in the previous paragraph. These minor competitors generally concentrate in transferring text books into application form, and then offer them to readers with different kinds of payment plans, portions and access periods. These payment plans can consist of for example, a certain undisclosed amount of money to gain access to one chapter of one publication for a month's timeframe.

The future of edutainment in general is considered bright by the interviewee because teaching by having fun has been determined to be a very effective way of teaching students regardless of what age group they might belong to. One aspect that might hinder the development of edutainment content, according to the interviewee, is the lack of programmers in Kenya. During the interview the interviewee mentioned that they had problems finding a sufficient amount of programmer's from Kenya to carry out the programming for their product and thus; had to go to Eastern Europe to find more programmers that were suited for the task at hand. Another major challenge exists in the Kenyan education system according to the interviewee. This is the lack of creative subjects incorporated into the school curriculum such as music, art and crafts. They used to be in the curriculum until 2002 when seven subjects were reduced to five subjects. A lot of emphasis is put on academic studies instead creative skills and talents that are important when it comes to ICT content production, independent decision making and problem solving.

According to the interviewee the edutainment content businesses in Kenya will be growing rapidly over the next 3 - 5 years, which means that the time to enter the market would be as soon as possible. Her personal experiences suggest that, the Kenyan market is very able to provide sustainable business opportunities to SME's. The interviewee also used MPESA as viable example of Kenya's future ICT development just like the Finpro interviewee did. For more information on the MPESA application please refer to topic 5.2 Case: MPESA located on page 12 of this report.

When comparing Kenya to the other African countries the interviewee mentioned that starting business operations and doing business in general is easier in Kenya than it is in the other African countries. According to the interviewee this argument is based on the fact that Kenya and its people have a tendency of being more susceptible towards new private companies entering the local marketplace.

Before ending the interview, the interviewee expressed her interest in the edutainment content that is in the process of being developed and supplied the interviewer with some valuable tips concerning the stories. These tips mainly included the localization of the created edutainment content depending on the location of the target market. Using local examples in the stories makes them easier to understand and grasp by their young readers in any given target market. The interviewee also made a research based point about the importance of young children reading imaginative story books directly relating to better success in school. (Mukherjee 2012)

#### 4.3 Interview 3: m:Lab, Nairobi, Kenya: John Kieti

By interviewing Mr. John Kieti at Nairobi's own m:Lab incubation center, a crash course in the recent history of Kenya's ICT development was received.

Like all the other interviewees thus far, Mr. Kieti determined it worthwhile to mention and use the MPESA application as a viable example of Kenya's situation in terms of its ICT development in mobile applications. The interviewee also used the MPESA application as an example of the reason why Kenya took the giant leap it did in terms of mobile innovation in the first place: "MPESA's success has created a need for mobile innovation to move to the next step of mobile innovation in East-Africa, he said."

The interviewee also mentioned that the local talent for mobile application development already exists in Kenya which ultimately results in mobile application innovation, generation and incorporation becoming possible in East-Africa and Kenya.



Additionally, the fact that smartphones in general have become affordable offers numerous opportunities for local Kenyan mobile application developers. The smartphone affordability more specifically contributes to increased individual productivity as well as improved and faster decision making processes for corporations of all sizes.

The East-African economy benefits directly from the increased productivity of individuals and companies created by the affordability of smartphones in the country. The use of Mobile Money applications also referred to as MPESA has also created an opportunity concerning the fact that the use of technology outside the urban areas in East-Africa and Kenya is also possible. Despite the created opportunity, a thought still exists that involves thinking that technological solutions are not meant to be used in the rural areas in East-Africa and Kenya. Thinking like this can potentially be very hazardous to the development of mobile innovation in the target area, which is why “these stereotypes need to be eliminated in order for new doors to open in terms of future technological development in Africa.” Assuming these stereotypes were eliminated it would enable “the utilization of innovative applications at the ‘grassroots’ ultimately benefitting the African society as a whole.”

To conclude the interview the interviewee mentioned that a number of smart applications are currently under development. One of these applications include social networks aimed for farmers that give them the ability to communicate with potential co-operating wholesalers and/or retailers that are interested in using the services offered by the farmer in question. This application contributes to the thinking that technology is not meant for urban areas only in East-Africa and Kenya. (Kieti 2011)

#### 4.4 Interview 4: KEFISO, Helsinki, Finland: David Okelo

Instead of interviewing Mr. Okelo of the Kenya Finnish Society a completed interview template was received by e-mail.

According to Mr. Okelo the best time to enter the Kenyan mobile edutainment content market would be as soon as possible. According to him the Kenyan population is embracing the newly found affordability of smartphones stated by Mr. Kieti in the previous interview. Devices like ipods, tablets and smartphones are being used by Kenyans now more than ever before, which will result in the market “becoming saturated and highly competitive during the next 3 years or so.”

The ability to offer sustainable development to the business idea is guaranteed by the ratio of roughly 50 million people living in Kenya, according to Mr. Okelo. Additionally, the fact that the market segment in question is not very competitive at this given moment is very likely to contribute the success of business operations within Kenya once they have been established. Finally, in addition to the statement made above Mr. Okelo mentioned that costs related to setting up new businesses in Kenya remain fairly low and contribute to increased interest from foreign and local investors.

To be able to start a new business or expand a pre-existing business as a single entrepreneur can prove to be challenging if the entrepreneur in question is not aware of “relevant governing bodies, licensing offices, property patents and rights, service operators and pre-existing monopolistic contracts.” Assuming enough preliminary research on target market and environment has been conducted as well as a handful of local contacts established; it should be fairly easy to establish or expand a business to the Kenyan marketplace.

The amount of demand the Kenyan marketplace is capable of offering to any company operating in the edutainment content field is strictly bound to what age group the edutainment content is initially developed for, according to Mr. Okelo. In the case in which the target market consists of children between the ages of 4-10 and their parents, it should be safe to assume that the target group would consist of approximately 15 - 20 million people.

Unlike according to the CEO of E-Limu and the consultant interviewed from Finpro Nairobi headquarters Mr. Okelo stated that financial support is available to private investors from the government, but it is rarely unconditional, which makes it less desirable for any one in need of financial support in terms of establishing business operations. The unconditional nature of the governmental financial support is likely to be the reason why the previous interviewees did not mention its existence at all.

In terms of separate devices and different mobile operating platforms Mr. Okelo stated that the term ‘mobility’ and ‘devices’ is the best possible platform that should be targeted at the time when the created edutainment content is ready to be launched into the Kenyan market. He based this statement by saying that roughly 80% of all Kenyans have mobile phones and use them frequently. For mobile device operating systems Mr. Okelo identified Android and Symbian based operating systems as most common in Kenya. He also mentioned that the iOS operating system is too

limited to Apple's own products in order to be considered a viable medium for product launch.

According the previous interviewees one might already say that marketing and distribution know-how already exists in Kenya. Mr. Okelo's thoughts on the subject were no different, so it can be safely assumed that considering outsourcing in terms of marketing and distribution is not needed at any point of the product launching process.

#### 4.5 Interview results and summary

Due to the qualitative nature of the interviews, constructing a decisive table covering all the interview questions proved to be rather problematic; however it was possible to create such a table using simplified versions of the interview questions which were then cross-referenced with the informational content received from the separately conducted interviews. Please refer to the images below to see the results indicated by the table created.

- 
- Q1. Is the Kenyan economy growing?
- Q2. Is the Kenyan Mobile Edutainment content market capable of offering foreign companies sustainable business opportunities?
- Q3. Would you consider the Kenyan mobile edutainment content market the "right" place to start operations within the field as a single entrepreneur?
- Q4. Does demand for edutainment content exist in the Kenya market place?
- Q5. Is it possible to apply for financial aid for mobile content/application development in Kenya?
- Q6. Does Kenya offer sufficient technical, marketing and distribution know-how in order to carry out a successful product launch?
- Q7. Have you heard of any similar edutainment content being developed by other companies within the Kenyan ICT markets?

Picture 6: Simplified interview questions

		Esa Rantanen				Nivi Mukherjee				John Kieti				David Okelo		
	Yes	No opinion	No	Yes	No opinion	No	Yes	No opinion	No	Yes	No opinion	No	Yes	No opinion	No	
Q1	X			X				X		X						
Q2		X		X				X		X						
Q3		X			X			X		X						
Q4	X			X			X			X						
Q5			X		X			X		X						
Q6		X			X		X			X						
Q7		X		X				X				X				

Picture 7: Interview Analysis Table

According to the research conducted using the above table and picture three out of four interviewees think that the Kenyan economy is growing. Out of those four, one interviewee had no opinion because the subject was not discussed during the interview. Concluding from these results it can be determined that the Kenyan economy is currently in a stage of rapid growth, however one must not forget take into account the aftermath of the general elections that were held on the 4<sup>th</sup> of March 2013. In other words, according to Mr. Rantanen at Finpro; many Kenyan companies are currently in a ‘waiting and seeing-stage’ in terms of their future decision-making processes businesswise.

The second question asked whether the Kenyan mobile edutainment content markets would be capable of offering foreign companies proper opportunities for sustainable businesses. Two interviewees out of four thought that the markets in question are capable of doing so. The two remaining interviewees were not directly asked the question, however; judging from the information received on their behalf one might assume that depending on the age structure and regional location of the target group, the Kenyan marketplace is capable of providing foreign companies with sustainable business opportunities.

Question three enquired whether the Kenyan mobile edutainment content market is the correct place to start operations within the given field as a single entrepreneur. For this question only one direct answer was received due to the open nature of the interviews. Directly quoting the answer received is preferably the best possible way to describe the answer to the question at hand: To be able to start a new business or expand a pre-existing business as a single entrepreneur can prove to be challenging if the entrepreneur in question is not aware of “relevant governing bodies, licensing offices, property patents and rights, service operators and pre-existing monopolistic

contracts (Interview with David Okelo, KEFISO).” In other words, according to the interviewee quoted; Kenya would be the correct place to start operations as a single entrepreneur provided that he/she is aware of the list of things discussed above.

The purpose of the fourth question was to determine whether the Kenyan marketplace was capable of providing a sufficient amount of user demand in terms of edutainment content. All of the interviewees thought that the demand exists within the Kenyan marketplace, provided that the selection in terms of target groups is conducted accurately. Even though, approximately 50 million people live in Kenya, it does not mean the entire population could be thought of as the target group for the edutainment content being developed. Before determining the final target group one must carefully study existing statistics and cross-reference those statistics to the age structure of the population in question. Using Table 1 (page 10) to do the cross-referencing would suggest that approximately 15-20 million people out of the 50 million could potentially be part of the target group. This argument is based on an estimation that is formed by adding the amount of 0-14 year old boys and girls together and rounding it up to include some of the parents of those children. Even though the estimated amount of people belonging to the target group is less than half of the entire country’s population one must remember that it still equals to almost four times the amount of total population in Finland.

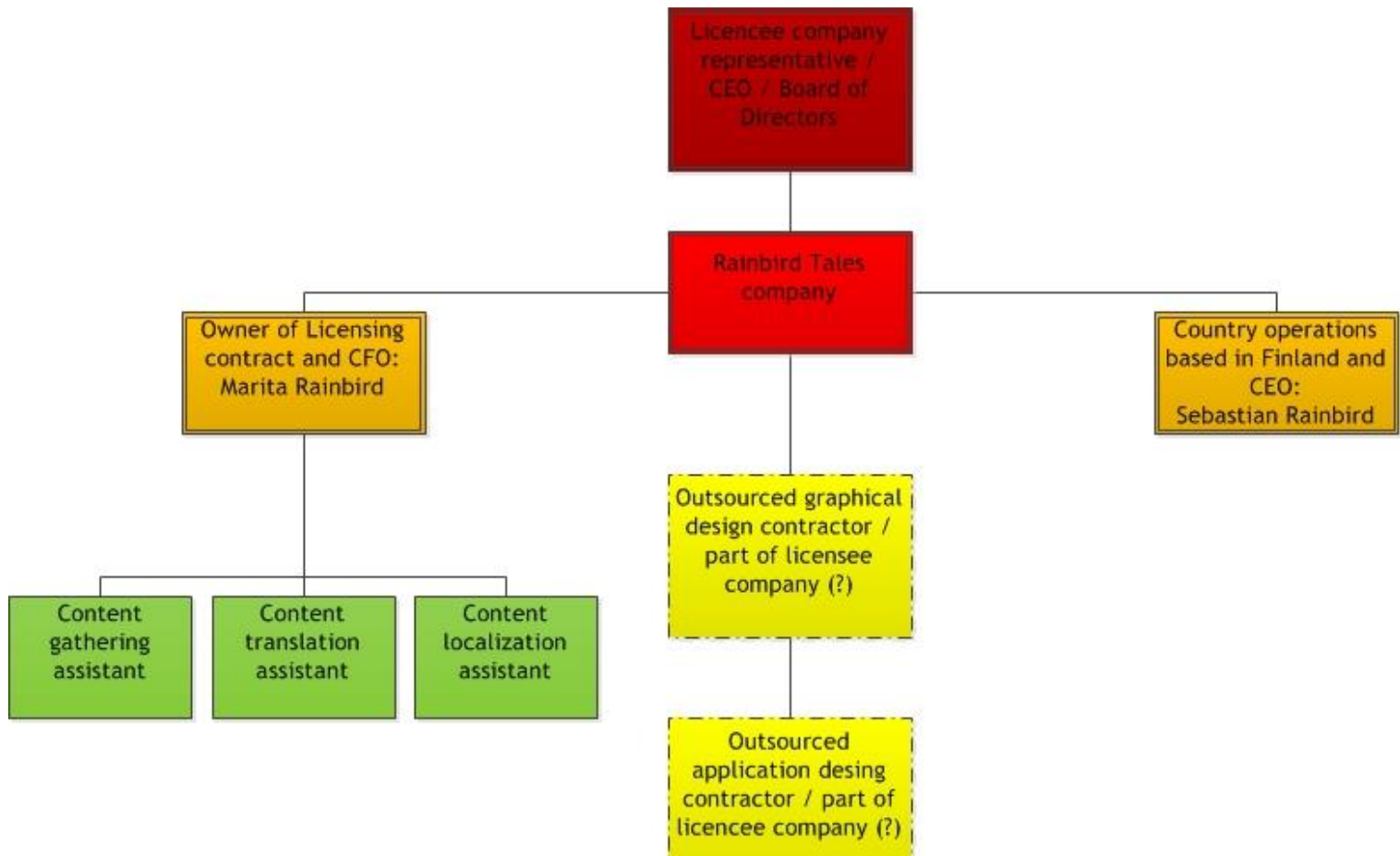
Question five aimed to find out if it was possible to apply for financial aid for developing mobile content/applications within the country internally. One interviewee thought that applying for financial aid within Kenya for the purpose in question is possible, but he clarified it by describing it further as ‘conditional.’ Out of the three remaining interviewees two had no direct opinion on the subject and one thought that applying for financial aid was not possible at all. One out of the two interviewees that had no opinion, provided the interviewer with interesting information on how she got external investors interested in her own business proposal. She started off by developing the idea at the iHub community that provides open spaces for dedicated young developers and ended up receiving financial support from external investors. In other words, knowing where to develop and what events to take part in, finding external investors for a business idea is possible. When it comes to government related financial aid it was made clear that it either does not exist or is not worth applying for due to its nature being ‘conditional.’

The sixth question was designed to determine whether Kenya is capable of offering foreign companies with sufficient technical, marketing and distribution know-how in order to carry out a successful product launch. For this question two interviewees

clearly stated that Kenya is capable of providing the things mentioned above to foreign companies interested in expanding/starting operations in the target country. Additionally, one of the two interviewees that had no opinion stated that finding programmers with the right set of skills proved to be challenging and that they had to go to Eastern Europe to find more people with the correct skillset. And finally, it is worth mentioning that one of the two interviewees that implied that Kenya is capable of offering sufficient know-how to foreign companies concerning application development is currently working with developers like this on a daily basis and thus, should be treated as a very reliable source of information. Judging from the aspects discussed above, one should be able to draw the conclusion that all the skills mentioned in the question are available in Kenya provided that foreign companies entering the market have the knowledge where to look before expanding to the Kenyan marketplace.

Finally, the seventh and last question set out to find out whether the interviewees had heard of any similar edutainment content being developed by other companies in Kenya. This question provided two separate answers. According to the interviewees only one had heard of a similar type of content being created as a joint venture between two larger entities within the target country (refer E-Limu CEO interview). Additionally, several other companies were identified during the series of interviews that are in the process of developing something close to the field within which the Rainbird Tales concept is aiming to operate within the Kenyan mobile edutainment content market. However, the several other companies discussed above cannot be thought of as direct competition to the content that is being developed. The above statements clearly suggest that the edutainment content being developed is not a highly competitive market and could, by all means generate a sustainable business opportunity in Kenya regardless of whether co-operation is established between the main competitor and the Rainbird Tales concept.

## 5 Organization and Management



Picture 8: Organizational Chart

The Rainbird Tales concept described and investigated in this thesis will be further developed by establishing a separate company that puts its emphasis on investigating further business possibilities. Like any other business, the income will be generated by clients that use the created content that is made available for purchase for an undisclosed amount of money. The purchasing prices will vary depending on the nature of the deal and the amount of usage of the created content by the clients.

The graph (Picture 7) drawn above aims to describe the initial company structure at the beginning once the separate company has been established. Preferably, the best way to enter the ICT market place in Kenya is to do so through co-operating companies that already have existing processes within. This way, licenses can be sold to the co-operating companies, giving them the privileges and rights to the created content and their usage. This also enables Rainbird Tales to receive funding for further developing its pre-existing edutainment content.

Rainbird Tales will initially have representation in Finland and in Kenya. The Finnish side will be in charge of country operations and will take care of all business related processes that have something to do with Finland and/or its corporate legislation. The Kenyan part of the business will be in charge of company money flow, further development and creation of the edutainment content. It will also have several people working for it in order to ensure that all created content is gathered, translated and localized efficiently.










The graphical design of the ready-made product will be outsourced in the Kenyan market. Alternatively, it can also be made the responsibility of the licensee company assuming that they have a department that specialized in content creation and graphical design. Along with the graphical design the mobile application creation and modification will be handled in the same manner. Because these aspects of the business are planned on being outsourced it would be important for the licensee company to be operating in the telecommunication/ICT field within the Kenyan market place.

In order to minimize business establishment related costs the product testing and piloting should be conducted by using a licensee company that has international experience of concepting, technology, distribution, marketing and merchandising. This will then give the people working for Rainbird tales the chance to concentrate on their own strengths which are concepting, content production and knowledge of the Kenyan market place.

Potential licensees for the Rainbird Tales concept can be either Finnish or African companies; however, in the case in which the licensee would be a company from Finland, it needs to be ready and interested in operating within the Kenyan market place. This is strictly because the Kenyan market offers more opportunities business development wise when compared to its Finnish counterpart.



## 6 Osterwalder's 9 steps and Business Model Canvas

Key Partners (KP)	Key Activities (KA)	Value Propositions (VP)	Customer Relationships (CR)	Customer Segments (CS)
 <ul style="list-style-type: none"> <li>- mLab</li> <li>- iHub</li> <li>- E-Limu</li> <li>- Nokia (?)</li> <li>- Rovio (?)</li> <li>- Safaricom (?)</li> <li>- Companies working with e-book platforms</li> <li>- Local educational institutions</li> <li>- Social networks</li> <li>- Location based networks</li> </ul>	 <ul style="list-style-type: none"> <li>- Website management</li> <li>- Application content</li> <li>- Production of new stories</li> <li>- Product modification / localization</li> </ul>	 <ul style="list-style-type: none"> <li>- Newness</li> <li>- Incorporates education and entertainment that aims to teach children valuable life lessons through interactive storytelling</li> <li>- Accessibility</li> <li>- Low price when compared to tangible story books (cost reduction)</li> <li>- Customization</li> <li>- Convenience / Usability</li> </ul>	 <ul style="list-style-type: none"> <li>- Automated services</li> <li>- Personal assistance</li> <li>- E-mail and website FAQ</li> </ul>	 <ul style="list-style-type: none"> <li>- Children (ages 4-10)</li> <li>- Schools and other educational institutions</li> <li>- Parents of children</li> <li>- Libraries</li> <li>- Teachers</li> <li>- Clubs</li> <li>- Key Partners</li> </ul>
	<b>Key Resources (KR)</b>  <ul style="list-style-type: none"> <li>- Human resources</li> <li>- Intellectual capital</li> <li>- Online storage</li> <li>- Application Management</li> <li>- Key account management</li> </ul>		<b>Channels (CH)</b>  <ul style="list-style-type: none"> <li>- Mix of partner owned channels and own channels</li> <li>- Websales</li> <li>- Application content sales</li> </ul>	
<b>Cost Structure (CS)</b>			<b>Revenue Streams (RS)</b>	
 <ul style="list-style-type: none"> <li>- Website management</li> <li>- Content production and modification</li> <li>- Application design</li> <li>- Graphical design</li> <li>- Licencing entire idea for product testing to key partners will greatly lower incurred total costs in terms of product development</li> </ul>			 <ul style="list-style-type: none"> <li>- Subscription fees for frequent users</li> <li>- Licencing for Key Partners and educational institutions</li> <li>- Lending/Renting/Leasing</li> <li>- Customer segment dependent pricing method</li> </ul>	

Picture 9: Business Model Canvas

## 6.1 Customer Segments (CS)

Osterwalder explains that according to him the customer segments building block mentioned in his book defines the target group or the people that the company is aiming to reach and serve. (Osterwalder & Pigneur, 20)

The customer segments for the product, as mentioned before, will be children between the ages of 4 years to 10 years old, schools and other educational institutions, libraries, teachers, clubs and key partners engaged through licensing agreements. The initial target groups are planned on being reached mainly through thorough co-operation with potential Key Partners. Additionally, the concept that can hereby also be referred to as the Rainbird Tales Concept will be licensed for piloting and testing to any interested well-established pre-existing company that already has international know-how in terms of concepting, technology, distribution, marketing and merchandising. Please see section 5.3.8 for more details on intended Key Partnerships.

When it comes to different types of customer segments listed by Osterwalder in his book; Business Model Generation, the “Segmented” approach mentioned describes the selection of customer segmentation for the Rainbird Tales Concept most accurately. This is because the concept aims to fulfill all the different needs and problems that are part of the selected customer segment(s). (Osterwalder & Pigneur, 21)

## 6.2 Value Propositions (VP)

The value propositions building block aims to describe the product(s) and/or services that make them worth buying to any particular customer segment. (Osterwalder & Pigneur, 22)

The Business Model Generation book lists several aspects that generate added value to the end users of the ready-made product. Five main points exist when it comes to value propositions for the Rainbird Tales Concept. These are listed as; newness of product, accessibility, cost reduction due to low price of product in comparison to pre-existing tangible story books, customization and convenience/usability. (Osterwalder & Pigneur, 23-25)

Increased accessibility is provided by offering all the created content through application platforms, online storage and website management. Additionally, utilizing

new technology and incorporating education as well as entertainment in order to teach children valuable life lessons through interactive story telling has not become very popular yet according to conducted preliminary research. (Osterwalder & Pigneur, 25)

The cost reduction aspect of the Rainbird Tales Concept is based on low price mobile edutainment content in comparison to traditional tangible story books that have a tendency of being expensive according to preliminary research conducted in Kenya.

Customization is provided through localization of the stories that are dependent on the target customer segment location. By localizing the stories they become easier to grasp by using examples that are already familiar to the user beforehand. (Osterwalder & Pigneur, 23)

Convenience/usability is generated by offering the content to the end users through application platforms and online storage. By doing this, the end users have access to the content from the comfort of their own home instead of having to go to libraries/books stores separately to buy a more expensive tangible story books. (Osterwalder & Pigneur, 25)

### 6.3 Channels (CH)

The channels building block consists of description how a company tries to reach its customer segments in order to deliver its intended value proposition. (Osterwalder & Pigneur, 26)

The ready content created by the Rainbird Tales Concept will be distributed through online purchases in form of online website sales, mobile application sales and licensed Key Partner owned channels. Questions like; “Which channels would work best and which channels would be the most cost-efficient?”, are impossible to provide answers to at this given moment because the potential licensing partners have not been contacted yet at this point of the business model generation process (Osterwalder & Pigneur, 27).

Only a limited amount of preliminary research has been conducted on this subject and it points out that some potential licensing partners are already attempting in developing something similar to the Rainbird Tales Concept or alternatively are in the process of creating their own E-book publishing platforms, like the Finnish company responsible for Angry Birds, also known as Rovio Entertainment Oy. In order to explore

these channels in more detail the potential licensing partners need to be contacted and evaluated separately. (Hänninen 2012)

#### 6.4 Customer Relationships (CR)

According to Osterwalder, the customer relationships building block entails explaining what kinds of relationships the company is focusing on creating with its different intended customer segments. (Osterwalder & Pigneur, 28)

The types of customer relationships that are planned on being created between the Rainbird Tales Concept and the end user are a mixture of automated services and personal assistance. In other words, the customer can contact the content provider through e-mail or alternatively try to find a solution to his/her problem by reading the answers for Frequently Asked Questions (FAQ) provided on the website itself. (Osterwalder & Pigneur, 29)

#### 6.5 Revenue Streams (R\$)

Osterwalder states in his book, that the revenue streams building block includes and describes the amount of money the company in question gains for each of its intended customer segments. He also clarifies that the company costs need to be subtracted from the revenues in order to find out how much the given company earned. (Osterwalder & Pigneur, 30)

The pricing mechanism that will be used will be highly dependent on the customer segment and is formed of subscription fees, licensing fees and lending/renting fees. The subscription fees are mainly intended for frequent users of the service when the lending/renting fees are intended for single users. These lending/renting fees can then be used as incentives to get the user subscribe for long-term fees assuming they have the need for the created content being offered by the Rainbird Tales Concept. The licensing fees are directed to co-operating companies that will be in charge of piloting, product testing and that already have international know-how in terms of conceiving, technology, distribution, marketing and merchandising. (Osterwalder & Pigneur, 31)

## 6.6 Key resources (KR)

The key resources building block describes what the company needs in order to make its operations work. The kinds of company assets can be almost anything, from heavy machinery to specifically tailored software. (Osterwalder & Pigneur, 34)

The most important resources for the Rainbird Tales Concept fall under the Intellectual and Human categories, listed by Osterwalder in his book: Business Model Generation. Proprietary knowledge, patents, copyrights and partnerships along with human resources are the most important Key Resources. (Osterwalder & Pigneur, 35)

Proprietary knowledge acquired by conducting preliminary research will act as incentive when searching for new potential partnerships, meanwhile; patents, copyrights and human resources will ensure that the creator of the Rainbird Tales Concept cannot be replaced/overthrown as the rightful owner of the concept itself.

## 6.7 Key Activities (KA)

Osterwalder's key activities building block describes the most important processes a company needs to do in order to make its business model work. These key activities can potentially consist of simple daily procedures or long-term operational plans. (Osterwalder & Pigneur, 36)

The Key Activities for the Rainbird Tales Concept is the production of new content and localizing it according to intended target segments. Even though platforms and networks are extremely important to the Rainbird Tales Concept they should not be considered to be a part of the Key Activities section of the business model generation process. This is because the platforms already exist and the networks that are planned on being used are already owned by potential co-operating companies. (Osterwalder & Pigneur, 37)

## 6.8 Key Partnerships (KP)

According to Osterwalder, the key partnerships of a company consist of a collection of the most important partners that enables the company's core competence to operate as intended. These partnerships could describe the company's network of suppliers for example. (Osterwalder & Pigneur, 38)

Key partnerships are very essential in order for the Rainbird Tales Concept to work. This based on the assumption that key partner owned networks will be used as part of distribution, piloting and product testing, marketing as well as merchandising. Two out of three listed motivators for creating partnerships listed by Osterwalder are considered important to the Rainbird Tales Concept. These are; “Optimization and economy of scale” that enables the optimization of the allocation of resources and activities as well as contribute to significant cost reduction, also; “Acquisition of particular resources and activities” that enables the Rainbird Tales Concept to acquire additional knowledge, licenses and access to customers through pre-existing co-operating company owned networks. (Osterwalder & Pigneur, 39)

The Business Model Canvas lists a selection of potential Key Partnerships, however they have not been approached yet which is why it is impossible to determine whether they will indicate any interest towards the Rainbird Tales Concept at this given moment.

## 6.9 Cost Structure (C\$)

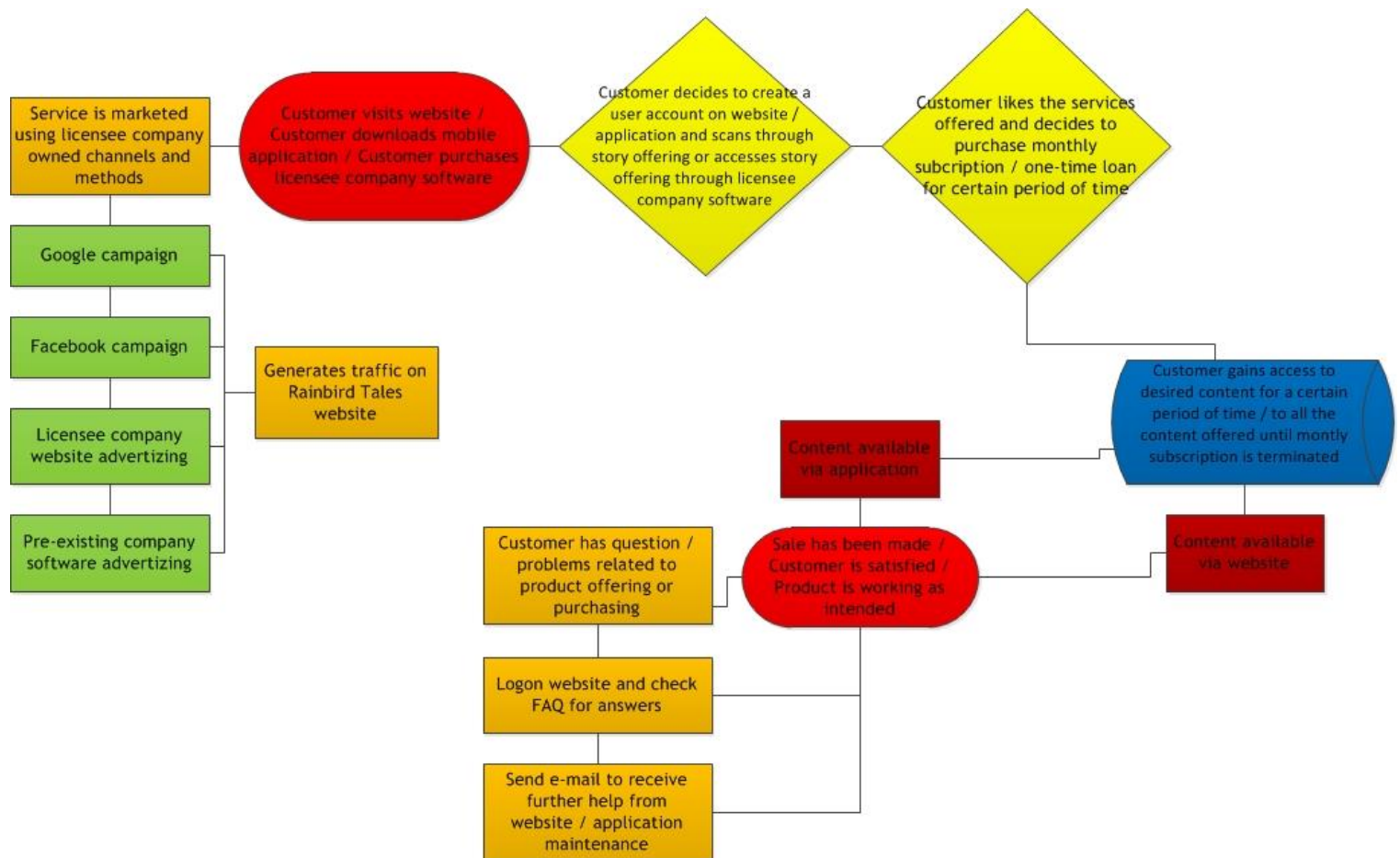
Last but not least, Osterwalder mentions the cost structure building block in his book. This building block states all incurred costs that are required to run the business as it was intended. These costs could consist of warehouse maintenance related costs, such as electricity and/or data transfer bills. (Osterwalder & Pigneur, 40)

The main costs for the Rainbird Tales Concept are formed of website management, content production and modification/localization, application design as well as graphical design. Application and graphical design can end up being exceptionally expensive because they are planned on being completely outsourced which is then planned on being countered by licensing the entire concept to potential co-operating companies that will be in charge of piloting and product testing, as well as distribution, marketing and merchandising.

The cost structure will be based on variable costs “that vary proportionally with the volume of goods and services produced.” Additionally, economies of scale and economies of scope are considered a part of the intended cost structure. Through key partnerships the economies of scale offer the Rainbird Tales Concept with lower bulk purchase rates in terms of application and graphical design costs. Also, through the same partnerships the economies of scope will provide the Rainbird Tales concept with marketing activities and distribution channels that are already being used by the

co-operating company that then owns the license for the concept itself. (Osterwalder & Pigneur, 41)

## 7 Marketing and Sales Strategy



Picture 10: Sales and Marketing Flowchart

The flowchart drawn above (Picture 9) strongly uses the writer's insights and experience to create ideas in terms of a successful strategy for sales and marketing. The ideas described in the flowchart should strictly be considered as such and therefore; what is actually done in order to carry out a successful marketing and sales strategy for the product may vary.

Pre-existing licensee networks will have a considerable part to play when it comes to a successful marketing and sales strategy which is why conducting further research on writer's insights when considering the target market is strongly advised. In order to determine whether, for example, Facebook marketing should be considered a viable channel for marketing the product in question one should investigate its effectiveness and amount of usage in the Kenyan market place before engaging in any activity of the sort. The writer's previous experience and knowledge suggests that Facebook marketing does work in large developed economies such as the United States, but should still be considered being in its baby shoes when comes to Scandinavian countries such as Finland.

When comparing Facebook marketing to Google advertising the latter is likely to yield better results based on the perception how each of the channels works. Facebook marketing can reach more views, but is less likely to generate sales because the people who see the Facebook ads are not necessarily looking for anything specific. When it comes to Google advertising the people are already searching for something by typing key words into the search field on the search engine website. This might generate less traffic, but is more likely to attract the right kind of clients that will potentially be interested in making a purchase and testing the product. If the usage of these channels were under debate; Google advertising would most likely be the better choice, however a combination of the two should also be considered depending on what the research material indicates once it is acquired.

Perhaps the most important aspect to the marketing of the Rainbird Tales concept should be conducted through licensee owned channels and websites by creating website banners and introductory articles related to the new content and its uses. This way the pre-existing customer base of the licensee company can also investigate the Rainbird Tales concept further assuming it generates enough interest among the group of customers in question.

The most lucrative clients for the Rainbird Tales concept are likely to be companies that work in the education and ICT fields in Kenya. Depending on what the companies make their money out of, they can then further improve their product/software offering by adding the services offered by the Rainbird Tales concept to make their offering more attractive in their customer's perspective. The Rainbird Tales concept will work on creating B2C processes, but the initial emphasis upon company creation will be placed in B2B networking, licensing and sales.



## 8 Conclusions

The conclusions section of the thesis aims to establish whether going through with the presented business idea to the target market in question is worth the effort based on information acquired through conducted interviews and other sources of information.

The interview results presented positive information implying that the Kenyan ICT market would be capable of offering the Rainbird Tales concept a potentially sound and stable business environment to take its product development further. To specify this argument further, take a look at some of the interview conclusions listed below:

1. The Kenyan economy is in a stage of rapid growth.
2. Depending on the age structure and regional location of the target group, the Kenyan marketplace is capable of providing foreign companies with sustainable business opportunities.
3. To be able to start a new business or expand a pre-existing business as a single entrepreneur can prove to be challenging if the entrepreneur in question is not aware of “relevant governing bodies, licensing offices, property patents and rights, service operators and pre-existing monopolistic contracts. Getting to know these governing bodies before entering the Kenyan marketplace is a significant advantage upon entry.
4. All of the interviewees thought that the demand exists within the Kenyan marketplace, provided that the selection in terms of target groups is conducted accurately.
5. Sufficient technical, marketing and distribution know-how in order to carry out a successful product launch already exists in Kenya. You need to know where to look.
6. Information suggests that the edutainment content being developed in Kenya is not a highly competitive market and could, by all means generate a sustainable business opportunity regardless of whether co-operation is established between the main competitor and the Rainbird Tales concept.

A few negative aspects were also identified in the process of acquiring information concerning Kenyan ICT and edutainment content. These have been listed below:

1. Knowing where to develop and what events to take part in, finding external investors for a business idea is possible. When it comes to government related financial aid it was made clear that it either does not exist or is not worth applying for due to its nature being 'conditional.'
2. Kenya's weakened relationship with the West can potentially hinder the growth of the Kenyan ICT market due to the recent results of the Kenyan presidential elections in March 2013.
3. The number of proficient programmers in Kenya is still insufficient but it is expected to improve in the near future.
4. The academic approach to Kenyan education can potentially slow down the development of edutainment content production in the country due to the lack creative subjects in the curriculum.

Judging by the number of pro's against con's listed above it is easy to conclude that the business opportunity definitely exists and should be further explored while exercising extra caution when thinking the next plan of action.

The trustworthiness of the information used to write this thesis is based on expert interviews that operate within the intended target market itself as well as previously written research material gathered mainly from between the years 2010 to 2013. Additionally, the writing style of the thesis makes assumptions based on information that was acquired by traditional literary reviews as well as personal expert interviews (Silverman, 360).

According to David Silverman 'theoretical transparency' is important in terms of determining whether the acquired qualitative data is reliable or not. In other words, the interpretations made in this thesis have been made from a theoretical standpoint that aimed in clarifying why certain interpretations are produced and why they exclude other possible versions of the very same interpretations (Silverman, 360).

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2012

Sebastian Rainbird

# **[INTERVIEW: MOBILE EDUTAINMENT CONTENT TO KENYA]**

This document contains ten (10) thoroughly formed questions related to the subject above. Please submit the answers to the questions above either via e-mail or as a separate word document as soon as you possibly can.

**Product:** edutainment content for mobile devices including audio stories for mobile phones and interactive e-books with multimedia elements for tablet computers.

**Potential customers:** children (ages 4 - 10), private consumers, schools, libraries, clubs

1. **How** would you describe the projection of the next 3 - 5 years in Kenya's mobile edutainment content markets? **When** would it be the most opportune time to establish a business? **Why**?
2. In your opinion, **do you think** the Kenyan mobile edutainment content market is capable of providing a sustainable business opportunity to companies that are considering starting operations to Kenya? **Why or why not?**
3. **Would** you consider the Kenyan mobile edutainment content market the "right" place to start operations within the field as a single entrepreneur? **Why or why not?**
4. **How much** potential demand **do you think** the Kenyan market will be able to provide to a single mobile edutainment content developer? **Should** the developer consider the entire Kenyan population or alternatively; a portion of it as potential customers for its product?
5. **Does** Kenya offer any financing possibilities in terms of mobile content development to the entrepreneurs that are considering starting operations in the country? For example; **government based** financial support, **educational institution based** financial support and/or **individual company based** support?
6. Assuming a mobile edutainment content application would be brought to the Kenyan markets, **which** platform should be chosen as the launching platform? Mobile phones or tablets? **Why**?
7. Out of these platforms, **which** operating systems should be favored? Android, iOS or others? **Why**?
8. **Which** mobile content platform manufacturers do you think will be able to offer the most affordable devices for the use of the content created? **Why**?
9. Assuming the mobile edutainment content application would be produced in Kenya, **would** there be technical, marketing and distribution know-how available in Kenya? Is it easily accessible?



10. **Is there** any edutainment content available for mobile devices in Kenya already? Is it in English and/or in Swahili? **Is there** any similar content in development in Kenya that you might have heard of? Please describe the product and its pricing if possible.

*Please submit the answers to the questions above either via **e-mail** or as a **separate word document** as soon as you possibly can. Alternatively a separate **Skype/telephone interview** can be arranged. Your insights will be held in high regard in terms of the thesis and the student himself. Thank you for your answers and time already in advance.*

*Yours sincerely,*

*Sebastian Rainbird*

*Studying to become a Bachelor in Business Administration at  
Laurea University of Applied Sciences, Leppävaara, Espoo, Finland*

## Happy Holidays from eLimu!



Thanks to your loyalty and goodwill throughout the year, 2012 was a very successful year for eLimu. Here's a brief wrap up of what we've been up to and what we're looking forward to:

First off, people all over the world are paying attention to eLimu; we've received coverage on [CNN](#), [CNBC](#), [Al Jazeera](#), [CIO East Africa](#), and [The Economist](#) to name but a few.

Closer to home, eLimu has teamed up with the Kenya National Library Service to use tablets in the children's section of their newest library in Kibera. 10 Kibera schools are participating in the Saturday program dubbed "Kids on the Tab." Over 50 students in Maria's Library are also using eLimu in Busia.

We remain committed to pioneering a cost-effective ed-tech revolution that will forge a future where every child is engaged, challenged and prepared with the right education to live up to their full potential.

Looking ahead, we are working towards retailing eLimu tablets in Feb 2013 within Nairobi and by July 2013, we want to be able to help students all over Kenya access an inclusive and equitable education through eLimu for as little as \$1 per month.

This future is possible. It will require us to realize that we must change our approach to education and disrupt the status quo. So continue to spread the word to friends, family and school administrators in your networks about us!

The eLimu team wishes you a new year filled with peace, joy, and meaning!

## Technology

# E-boards, tablets making way to classrooms

The technologies ensure there is instant sharing of learning content from teachers' E-boards to students' personal tablets

By PHARES MUTEMBEI

Pupils in primary schools will be able to use tablets and laptops if ongoing talks between Government and Samsung come to fruition.

The electronic maker plans to modernise schools by allowing pupils to use new technologies during lessons.

If the classrooms go digital as envisaged, gone will be the days when students had to carry loads of back-breaking schoolbags and fill uncountable exercise books.

In the new learning dispensation, there will be instant sharing of learning content from teachers' tablets or E-boards to students' personal tablets. The idea is to make learning modern, interactive and fun-filled. Notebooks will be replaced by computer tablets, saving parents loads of money and students and teachers' time and energy.

The Samsung Smart School programme was launched in Nairobi last week, in an event that saw students get a feel of how modern technology such as computer tablets and mobile phones can make learning fast and friendly.

The students were also able to see how learning can be fun even when dealing with subjects like mathematics and science, which are presumed to be difficult.

The launch of the ambitious programme, at Samsung Engineering Academy in Westlands, saw a demonstration of how technology enables teachers to gain more control of classroom and monitor class participation during lessons.

## REAL TIME

"If the technology is embraced by the education fraternity, the benefits will be immense," said Mr Edward Njoroge, a teacher of Lavington Primary School.

In a break from traditional classroom where teachers stand in front of class and write on chalkboards and students scribble notes in exercise books, the new technology will see teachers write on their E-boards and send material to students' devices in real time. The E-board has a fea-



## TABLETS COMING TO SCHOOLS

- Teachers will monitor students work on tablets in real time
- By monitoring the students' devices, the students cannot be distracted by other material
- "I will be able to control students' tablets through the E-board. Definitely, it will be more efficient, fun and interactive," said a student
- Students and teachers welcomed the new concept, since it allows them to interact

A teacher monitors students as they work on tablets. (PHOTO: PHARES MUTEMBEI/STANDARD)

and teachers at the event welcomed the new concept, since it allows them to interact, share material in the classroom and even after school.

"To generate interest among students in embracing the digital learning concept, the training programme focuses on demonstrating how modern technology such as computers, tablets and mobile phones enhance learning," said Samsung Electronics East Africa's Koki Muia.

## FUTURE NEAR

He added schools in Kenya should keep pace with others across the world.

"We are achieving digitalisation of classrooms. We are bringing the future closer. It is a solution that makes learning more interactive. We want to roll out

the concept in Kenya's schools, including those in rural areas," said Muia.

By 2015, Robert Ngeru, Samsung's Deputy Managing Director, said they hope to reach several schools across Kenya.

"We are in discussions with private school boards and the Ministry of Education and by early next year, we will know the details," said.

The adoption of a digital classroom management system will enhance the quality of education as the solution provides better learning.

"Through the Smart School programme, we are going beyond making our children more tech-savvy, but also equipping them with skills that will position them for success in the global arena," noted Muia.